eLandings: Electronic Catch Reporting System for Alaska's Commercial Fisheries

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Introduction

• One-stop electronic reporting system for commercial fisheries data in Alaska

• Allows for the electronic reporting of landings and production data for crab, halibut, sablefish, other Federal and State groundfish, salmon

• Used by limited access and other management programs such as the Rockfish Program, Amendment 80, Community Development Quota, Individual Fishing Quota, American Fisheries Act Pollock Program

• Designed by an interagency team from NOAA Fisheries, the Alaska Department of Fish and Game, and the International Pacific Halibut Commission

Objectives

• Single repository for multiple types of data

• Increase report timeliness; agency staff receives near real-time catch data

• Reduce data-entry for users

• Improve landing and production data accuracy with system validation checks

• Provide data extract capabilities for Enforcement, State Troopers, inseason management, industry staff

Methods

• Implemented in August 2005 with rationalized crab fishery, expanded to Federal and State groundfish fisheries in 2006, and introduced to at-sea catcher processors in 2007 (see graph at right)

• Four pathways for data-entry: web interface, stand-alone client and email, system-to-system exchange, and the agency desktop

• Shared JAVA code among the web interface, web services, and the stand-alone client

• System provides a printable receipt of landings and production data

• Visible system monitoring and 24-hour system support

• Help desk and call-forwarding service ensure user support on nights and weekends
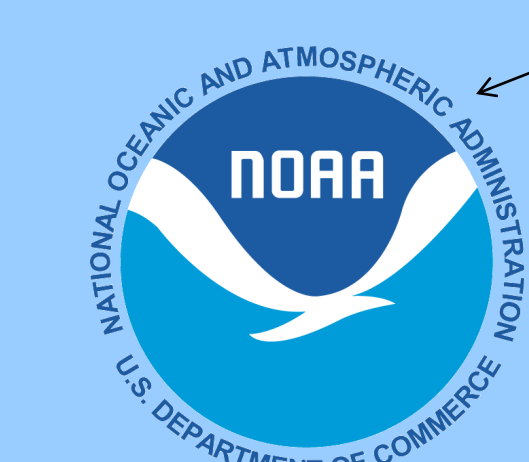
Web-based reporting

Desktop reporting via email

Agency interface

System-to-system data exchange (xml)

eLandings server (24/7)

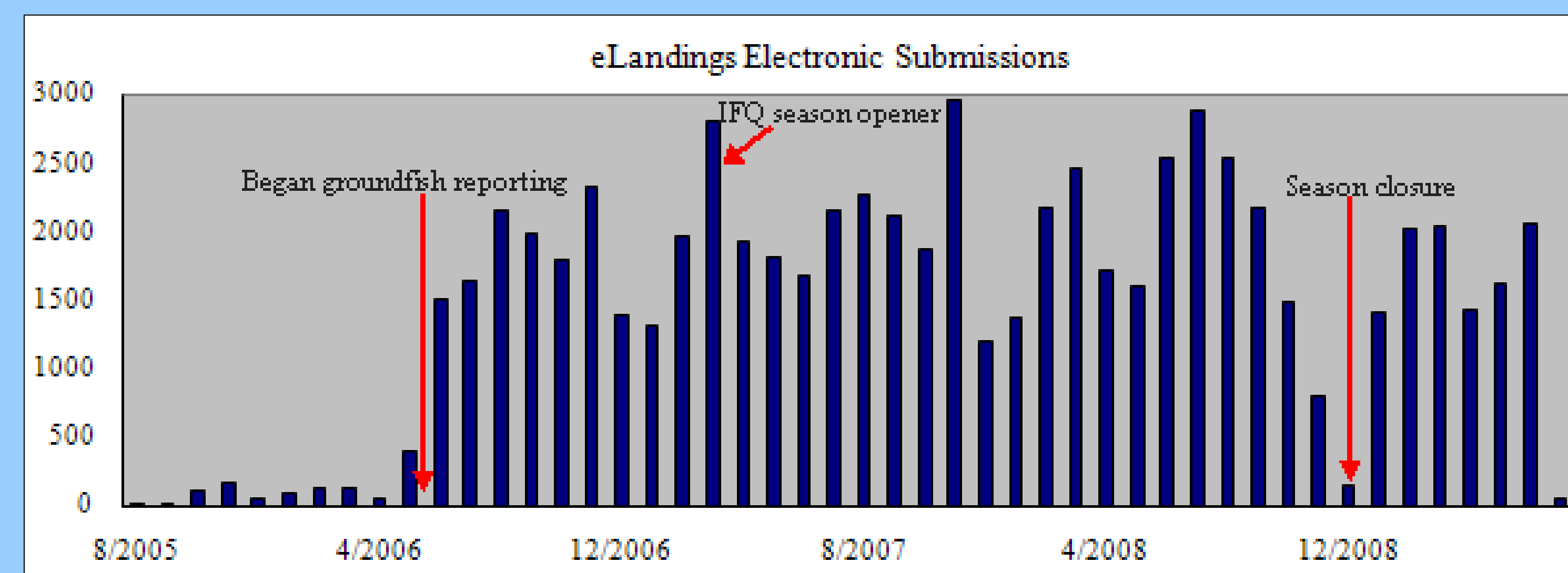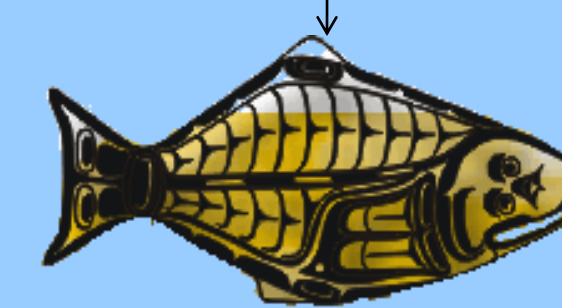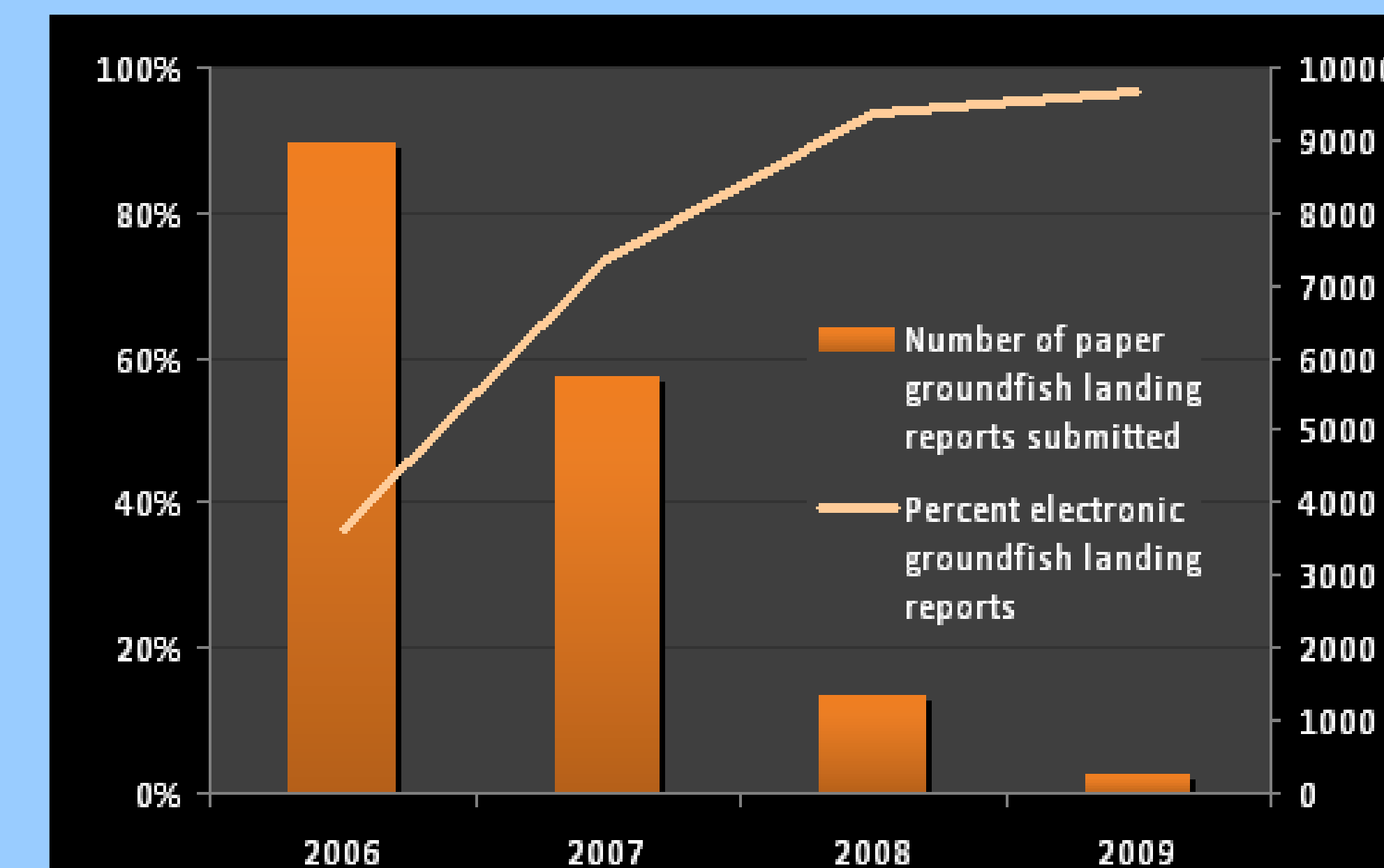NOAA Fisheries   International Pacific Halibut Commission   Alaska Department of Fish and Game
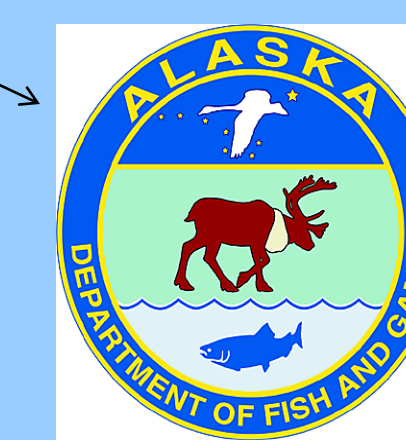
Results

• Reduction in submission of paper reports (see graph above); in 2008, 94% of crab and groundfish landings were electronically submitted and 48,000 landing reports submitted electronically since 2006

• System data validation checks reduce data-entry errors

• Dramatic reduction in lag between catch and availability of accurate and complete catch data for fisheries management

Challenges

• User support can be time-consuming, especially when experienced users have complex reporting issues

• Requires constant communication with all agencies involved

• High turn-over rate at some plants/on-going training

• Long learning curve for some users

• Connectivity issues in remote areas and while at-sea

• Upgrading the desktop software on remote at-sea vessels to account for system updates and changes in reporting requirements

• User's guide needs constant updating as reporting system changes over time

• Keeping regulations up-to-date and sufficiently general to allow for progressive change to the reporting system

• Complexities of how fisheries are managed creates inherent complexities in reporting system

• Supporting 24x7 industry with 8x5 agency staff

Future Directions

• Increase data import/export capabilities to allow industry to incorporate their own database systems

• Upgrade the system using feedback received during annual workshops and daily support calls

• Expand electronic data-entry of landings and production data to include other species fisheries

• Continue improving eLandings user support and documentation, including the development of video training

http://elandings.alaska.gov